

ACCIDENT

Aircraft Type and Registration:	Piper PA-32-260 Cherokee Six, G-BHGO	
No & Type of Engines:	1 Lycoming O-540-E4B5 piston engine	
Year of Manufacture:	1978	
Date & Time (UTC):	11 December 2005 at 1300 hrs	
Location:	Eshott Airfield, Northumberland	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 4
Injuries:	Crew - None	Passengers - 1 (Serious) 1 (Minor)
Nature of Damage:	Damage to fuselage, wing, horizontal stabiliser, engine, propeller and landing gear (beyond economic repair)	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	44 years	
Commander's Flying Experience:	390 hours (of which 12 were on type) Last 90 days - 12 hours Last 28 days - 0.5 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB	

Synopsis

Following a normal landing on a paved runway in gusty wind conditions, the aircraft veered to the left and departed the side of the runway without the pilot being able to regain control. The aircraft hit an embankment and three fence posts, damaging the aircraft and causing a serious spinal injury to one of the passengers. The cause of the loss of control on the ground could not be established but the gusty wind, the pilot's distraction during the approach, or an accidental control input could have been contributory factors.

History of the flight

On the day of the accident the pilot decided to take four passengers on a scenic flight from Eshott to Newcastle Airport and then return to Eshott via the bridges over the River Tyne. The passenger in the right front seat had not flown in a light aircraft before but he was keen to conquer his fear of flying and was considering taking flying lessons. The pilot believed that he briefed him not to touch the control yoke or the rudder pedals, although the passenger did not recall such a briefing. The pilot commented that it was a "bit bumpy" during the flight to Newcastle, due to turbulence caused by strong wind, and after landing the pilot and passengers went for coffee at the airport.

The pilot and the front-seat passenger later provided differing reports of what occurred during the flight to Newcastle and the return flight to Eshott, which did not include flight over the bridges on the River Tyne. Without recorded data or independent witnesses it was not possible for the AAIB to reconcile the reports and neither version provided a direct explanation of the landing accident.

Arriving back at Eshott, the pilot set up an approach to Runway 26 using three stages of flap and an approach speed of 85 to 90 KIAS. The pilot estimated the wind to be from 240° and gusting to 15 kt and the wind at Newcastle Airport, 15 nm to the south, was reported as 230° at 17 to 21 kt. The pilot reported that the front-seat passenger was chatting during the approach so he asked him to be quiet, although the passenger's recollection differed: the passenger believed the pilot was distracted because he was having difficulty locating the airfield. The touchdown on the paved runway surface was normal according to both the pilot and front-seat passenger. The pilot said the aircraft tracked straight along the centreline for approximately 35 m and then suddenly veered to the left. At first the pilot thought a tyre had burst so he decided against a go-around. He applied full right pedal but this did not seem to have any effect so he applied the brakes. The pilot reported that he could not regain control and the aircraft skidded off the edge of the runway and hit the side of a soil embankment about 2 ft high. The embankment arrested the aircraft's sideways movement but it continued rolling forwards, striking three solid wooden fence posts in quick succession before coming to rest. The pilot stated that he began his shutdown checks as soon as he realised that they were going to hit the fence. The front-seat passenger said that the aircraft veered sharply to the left shortly after landing and he remembered hearing a "bang, bang, bang" as the

aircraft hit the fence posts. He said he also remembered the left side of the aircraft coming to rest while he continued to travel forwards and then he felt himself being jerked forwards, although he did not hit his head. After the aircraft came to rest, the pilot and the front-seat passenger were able to exit via the forward door and the remaining passengers exited via the rear door. Assistance from the airfield services arrived within five minutes. The aircraft's cabin remained virtually intact but, despite this, the front-seat passenger sustained a serious spinal injury and required hospitalisation.

The owner of the aircraft was at the airfield at the time of the accident and watched the aircraft land. He said it was a normal touchdown but then the aircraft disappeared from his view behind a hangar. Shortly afterwards he received a call on his mobile phone from the pilot saying that he had had an accident. The owner initially thought it was a joke because he had seen such a normal landing and had difficulty believing that an accident could have ensued.

Aircraft examination

The aircraft was not examined by the AAIB but photographs of the aircraft revealed that the majority of impact damage occurred to the left wing leading edge and left side of the horizontal stabiliser, which was consistent with the impact with the fence posts and embankment. The propeller blade tips were both bent mildly back, which was consistent with a low power setting. Both main landing gear legs and the nose leg remained attached but the nose leg had sustained a slight bend. Despite the damage, the owner reported that the nose wheel steered freely in both directions when the rudder pedals were applied.

Analysis

The pilot stated that everything happened so quickly after landing that he was unable to determine specifically what caused the aircraft to leave the runway. He thought that there could have been a “freak gust” of wind during the landing or, possibly, his passenger accidentally applied the rudder pedal. However, the front-seat passenger said he did not touch the controls at any point during the flight, that he kept his feet behind a metal rim on the floor and that he believed that his feet would not have reached the pedals.

According to both the pilot and the front-seat passenger, the atmosphere between them during the final approach into Eshott was tense. This would have contributed to the pilot’s mental workload and could have contributed to the loss of control after landing, particularly in the gusty wind conditions.

In summary, the cause of the loss of control on the ground could not be positively established but the gusty wind, the pilot’s distraction during the approach or an accidental control input could have been contributory factors.